

Glossary

Adventitious roots. Additional roots that develop in some plants, such as willows and alders, as an adaptation to saturated or flooded conditions.

Bog. A unique type of wetland dominated by mosses that form organic peat. Bogs form in areas where the climate allows the accumulation of peat to exceed its decomposition. Bog hydrology is dominated by precipitation rather than surface inflow. The plant community is specialized to survive in the nutrient-poor and highly acidic conditions typical of bog systems.

Canopy cover. The degree to which the foliage of the highest vegetation layer in a plant community blocks sunlight or obscures the sky.

Capillary action. The movement of water through tiny spaces as a result of cohesion (water molecules sticking to other water molecules) and adhesion (water molecules sticking to molecules of other substances). Capillary action can result in the soil being saturated for several inches above the water table in some soil types, as water molecules move upward through tiny pores in the soil.

Capillary fringe. The area immediately above the water table in which water is drawn upward through the soil by capillary action.

Conductivity. A measure of the amount of dissolved constituents (ions) in water, based on the water's ability to conduct electricity. See *specific conductance*.

Contributing basin. An area from which surface water drains to a particular wetland.

Corixids. A group of aquatic insects commonly called "water boatmen."

Cowardin classification. The first commonly used classification system for wetlands developed in 1979 by the U.S. Fish and Wildlife Service. The Cowardin system classifies wetlands based on water flow, substrate types, vegetation types, and dominant plant species.

Cryptogamic crust. A thin crust composed of mosses, lichens, algae, and bacteria that forms in areas of bare ground between shrubs, grasses, and other plants. Cryptogamic crust is found in undisturbed arid and semi-arid lands such as the shrub-steppe ecosystem of the Columbia Basin.

Decomposer. An organism that breaks down organic material into smaller particles. The action of decomposers allows the chemical constituents of organic matter to become available for uptake by plants, thus "recycling" this material back into the food chain.

Dioxin. A group of several hundred chemical compounds that share certain chemical structures and biological characteristics. They include the chlorinated dibenzo-*p*-dioxins (CDDs), chlorinated dibenzofurans (CDFs), and some polychlorinated

biphenyls (PCBs). The term dioxin is also used to refer to a well studied and toxic dioxin, 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD).

Dytiscids. Predaceous diving beetles.

Ecoregion. Geographic regions where climatic conditions are similar and the ecosystems (including wetlands) are relatively homogeneous.

Ecotone. An area that is transitional between two different types of ecosystems and has some of the features of both. Wetlands are often characterized as being ecotones between aquatic and terrestrial ecosystems.

Edge. The boundary where habitats meet or where successional stages of plant communities come together; for example, between an open wet meadow and a mature forest.

Emergence trap. A device placed over the water or sediment in a wetland to capture flying aquatic insects as they emerge from their non-flying larval state into their winged adult form.

Eutrophication. Enrichment of a water body by nutrients, often as a result of human activities.

Evapotranspiration. The combination of water that is evaporated from the surface and that is transpired from the leaves of plants as part of their metabolic process.

Fen. A type of wetland similar to a bog, containing accumulated peat. Fens support marsh-like vegetation including sedges and wildflowers. Fens differ from bogs in their plant communities, hydrology, and water chemistry. They are fed by groundwater and are not as acidic as bogs.

Forb. Any herbaceous plant that is not a grass or sedge.

Functional feeding group. A group of animals (aquatic insects, birds, etc) that feed in a similar way. For example, insects that scrape algae from rocks in a stream are called scrapers; those that shred leaf material are caked shredders; and those that filter small particles from the water column are filter feeders.

Furans. A chemical substance resulting from the manufacture of organic compounds such as nylon.

Geomorphology. The geologic composition and structure of a landscape—its topography, landforms, soils, and geology.

Hemipterans. A group of insects with straw-like, sucking mouth parts.

Herbaceous stratum. A layer of non-woody vegetation, usually less than 6 feet (2 m) tall.

Hertz (Hz). A unit of frequency equal to one cycle per second.

Hortonian flow. A phenomenon that results when the intensity of rainfall exceeds the capacity of the soil to absorb it, and water runs across the surface.

Humic. Of or pertaining to humus, which consists of partially or wholly decayed plant matter.

Hydrogeomorphic (HGM) classification. A system used to classify wetlands based on the position of the wetland in the landscape (geomorphic setting), the water source for the wetland, and the flow and fluctuation of the water once in the wetland.

Hydroperiod. The pattern of water level fluctuations in a wetland. Includes the depth, frequency, duration, and timing of inundation or flooding. Patterns can be daily, monthly, seasonal, annual or longer term.

Interior species. Animal species that require the conditions found on the interior of a habitat type and which are subject to disturbance in areas toward the edges of that habitat. For example, forest interior birds find optimum conditions within the center of a forested area where they are not subject to domestic pets, noise, severe weather, or other disturbances that penetrate the outer forest edge.

Jurisdictional wetland. A wetland that is regulated by the provisions of the law under the jurisdiction of one or more federal, state, or local agencies. Not all areas of the landscape that have the biological characteristics of wetlands are regulated or jurisdictional wetlands.

Lacustrine. Pertaining to lakes or lake shores.

Large woody debris (LWD). Large pieces of downed wood such as logs, rootwads, and limbs that are in or near a body of water. LWD provides habitat structure for fish and other aquatic organisms.

Lentic. Having slow moving or still water, such as a pond or lake.

Lotic. Having running water, such as a river or stream.

Macrophytes. Plants that can be seen with the unaided eye. This includes all vascular plant species, mosses, and large algae.

Metapopulation. A group of local populations between which individuals can migrate.

Microbe. A microscopic organism, such as a bacterium.

Microhm. A unit of measure describing the resistance of a substance to electrical current.

MilliSiemens. A unit of measure for conductivity. See *specific conductivity*.

Mycorrhizae. The symbiotic association of a fungus with the roots of a plant.

Niche. The area within a habitat occupied by an organism; the set of functional relationships of an organism or population to the environment it occupies.

Oligotrophic. Water that is relatively low in nutrients.

PCBs. Polychlorinated biphenyls, a type of toxic chemical compound once widely used in electrical equipment. See *dioxin*.

Periphyton. Plants growing on the bottom substrate of a water body.

Phreatic zone. The area above the groundwater table.

Recruitment (of woody debris). The movement of large and small wood from surrounding areas into an aquatic system over time through the actions of wind, water, or other means. The potential for recruitment of woody debris influences the long-term habitat structure within an aquatic system.

Redox potential. Reduction-oxidation potential, or a measure of the potential movement of electrons in a system. Reduction refers to the chemical process whereby molecules of a substance gain an electron. Oxidation refers to loss of electrons. Measuring the redox potential of a wetland soil provides information about the types of chemical reactions that are occurring in the soil, and thus whether the soil is more aerobic (contains oxygen) or anaerobic (lacks oxygen).

Richness. The number of different species of organisms present in a community.

Riparian. The strip of land adjacent to a body of water that is transitional between the aquatic system and the upland. Some riparian areas contain wetlands.

Rotifers. Minute organisms that live in fresh and salt water. A crown of hair-like structures (cilia) propels them through the water.

Roughness. The amount of friction or resistance a surface provides against water flow. For example, an area containing shrubs and downed branches has greater roughness than a mowed lawn.

Specific conductance. A measure of electrical conductivity standardized to 25°C. Use of specific conductance accounts for the fact that the conductivity of water changes as its temperature changes. It is measured in units of milliSiemens per centimeter.

Stratigraphy. The layers (strata) in a geologic formation.

Subbasin. A smaller drainage basin that is part of a larger drainage basin or watershed. For example, the watershed of a large river may be composed of several subbasins, one for each of the river's tributaries.

Temporal loss of function. The concept that there is a time lag between the loss of existing wetland functions through human or natural disturbance and the reestablishment of functions over time.

Trophic level. A concept used to describe feeding levels in a foodweb. Plants fill the first trophic level by utilizing sunlight to create carbohydrates and other compounds. Plants are consumed by plant-eating animals (herbivores) in the

second trophic level, which in turn become food for predators in the next trophic level, and so on.

Watershed. A geographic area of land bounded by topographic high points in which water drains to a common destination.